

TRACK AND BALLAST JACKS



Fig. 6



Fig. 1



Fig. 116-117-118



Fig. 101

No. 6 Simplex Double Acting Ballast and Track Jack

For heavy track, ballast and crossing work. Massive construction is combined with proven material. Simplex mechanism, combined with careful design, resulting in increased efficiency, has led many of the leading railroads to adopt this Jack.

SPECIFICATIONS

Standard.....	Malleable Iron	Capacity, tons.....	15
Lever Socket.....	Crucible Steel	Lift, inches.....	18 1/2
Rack Bar.....	Drop Forging	Height, inches.....	31
Pawls.....	Drop Forging	Weight, with pole, lbs.....	96
List price.....		\$32.00	

No. 1 Simplex Double Acting Track Jack

Built for "above-the-average," really efficient duty on track, ballast or construction work. Keen attention to every detail, combined with Simplex mechanism and the resultant increased efficiency, has led to the adoption of this Jack by many of the largest railroads. All parts are heavier than average requirements might justify, but the Jack never fails on any demand.

SPECIFICATIONS

Standard.....	Malleable Iron	Capacity, tons.....	10
Lever Socket.....	Crucible Steel	Lift, inches.....	13 1/2
Rack Bar.....	Drop Forging	Height, inches.....	25
Pawls.....	Drop Forging	Weight, with pole, lbs.....	65
List price.....		\$18.00	

Nos. 116, 117 and 118 Simplex Surfacing Ballast and Track Jacks

Single Acting—Operating on the Down Stroke of the Lever, or Tripping at any Position.

A trio of track Jacks that have no equals for efficiency and simple design. The upper pawls, with rack engaging teeth at the bottom, swing as pendulums from the frames. The lower pawls which fulcrum in sockets in the frames, engage the rack bar teeth or may be pulled backward to engage the upper pawls in recesses provided to trip the load. In this way a tooth by tooth lowering device or a quick trip to low position is effected.

Each bearing is a heavy trunnion, cast integral with the lever socket, and rotates in a hardened steel, closed end, lubricant-retaining bushing.

No. 116. A Jack of small height, low lift and little weight, that is easily and quickly carried. Combining a tripping or tooth-by-tooth lowering device, it has power and speed for all surfacing work.

No. 117. The most simple, yet efficient design of track Jack built, and a great favorite for track work.

No. 118. For ballast work particularly, this is the ideal Jack. Of great height and lift. It easily raises the track clear of all ballast during construction, even though the ground, because of its softness, may allow the base to sink. As is often necessary, the track may be lowered gradually, or dropped all the way. This is accomplished by operating the two pawls. The upper one, with rack engaging tooth at the bottom, swings as a pendulum from the frame. The lower operates like those in the Nos. 116 and 117.

SPECIFICATIONS

Standard.....	Malleable Iron	No. 116	117	118
Lever Socket.....	Crucible Steel	Capacity, tons.....	10	15
Rack Bar.....	Drop Forging	Lift, inches.....	8	12½ 18¾
Pawls.....	Drop Forging	Height, inches.....	15¼	20½ 28
Bushings and Keys.....	Steel	Weight, with pole, lbs.....	46	55 70
List price, No. 116.....		\$20.00		
List price, No. 117.....		22.00		
List price, No. 118.....		32.00		

No. 101 Simplex Track Jack

Double Acting—Operating on the Up and Down Stroke of the Lever, or Tripping at any Position.

This Jack meets the demand for a compact double-acting Track Jack. It reduces the height of all former Jacks of equal lift, thereby reducing the weight accordingly. Yet because of its massive, heavy construction, it is the master for all work in connection with the heaviest rails.

SPECIFICATIONS

Standard.....	Malleable Iron	Capacity, tons.....	10
Lever Socket.....	Crucible Steel	Lift, inches.....	13 1/2
Rack Bar.....	Drop Forging	Height, inches.....	21
Pawls.....	Drop Forging	Weight, with pole, lbs.....	58
Bushings and Keys.....	Steel		
List price.....			\$22.00

SIMPLEX GEARED JACKS

Single Acting—Operating on the Down Stroke of the Lever

These Jacks are designed for easily handling loaded refrigerator and railroad cars, locomotives, or heavier industrial work. Cast integral with the frame is a gear case which houses a heavy drop forged pinion and ratchet wheel, both of which are heat treated and hardened. Engaging snugly with this pinion is a heavy rack, which is forged from chrome nickel steel. The pinion rotates on bronze bushings. The pawls, which are operated by the crucible steel socket, engage the teeth of the ratchet wheel so that it raises or lowers the rack bar on each stroke of the lever. These pawls are made of chrome nickel steel in the No. 25 Jack, and chrome vanadium steel in the No. 35. Under all circumstances the pawls are locked so that the load cannot be dropped. Carrying handles are provided upon each side. The raising and lowering movement of the rack bar is governed by the indicator upon the side of the Jack.

Each bearing is a heavy trunnion, cast integral with the socket and rotates in a hardened steel, closed end, lubricant-retaining bushing. Grease cups are provided where necessary.

SPECIFICATIONS

Standard.....	Malleable Iron	Pawls.....	Chrome Nickel Steel
Lever Socket.....	Crucible Steel	Bushings and Keys.....	Steel
Rack Bar.....	Chrome Nickel Steel	Capacity, tons.....	No. 25, 25 No. 35, 35
Ratchet Wheel.....	Drop Forging	Lift, inches.....	No. 25, 16½ No. 35, 16½
Pinion.....	Drop Forging	Height, inches.....	No. 25, 27 No. 35, 26½
Bearings.....	Bronze	Weight, with pole, lbs.....	No. 25, 150 No. 35, 200
Cap.....	Drop Forging		
List price, No. 25.....			\$100.00
List price, No. 35.....			135.00

SIMPLEX CAR, INDUSTRIAL AND BRIDGE JACKS

Single Acting—Operating on the Down Stroke of the Lever.



The Simplex mechanism locks the working parts in every position—a load can never drop. Each bearing is a heavy trunnion, cast integral with the lever socket, and rotates in a hardened steel, closed end, lubricant-retaining bushing.

The design and construction embody the most minute details to increase long life and service. Even an apron is provided over the socket opening to keep dirt from internal parts. Direction of operation is governed by the reversing indicator on the side.

No. 2. Simplex Industrial and Car Jack. Designed for use on interurban cars, for contractors and industrial service, as well as for track work. Heavy loads are easily handled, because of the high efficiency.

No. 4. Simplex Bridge or Car Jack. Designed for bridge and heavy construction work. Powerful, rapid, highly efficient and is built for rough, abusive service. The extra heavy base and reinforced standard, with high carbon-forged rack bar, provide a positive guarantee of a long, efficient life. Smaller details of design, such as an apron over the socket opening to keep dirt from internal parts, are carefully watched.

No. 10. Simplex Car, Industrial and Bridge Jack. The specifications, construction and power of this Jack have produced the basis of economy in car and bridge repairing.

SPECIFICATIONS

Standard.....	Malleable Iron	No.	2	4	10
Lever Socket.....	Crucible Steel	Capacity, tons.....	10	15	15
Rack Bar.....	Drop Forging	Lift, inches.....	12	11½	17½
Pawls.....	Drop Forging	Height, inches.....	20½	22½	28
Bushings and Keys.....	Steel	Weight, with pole, lbs.....	66	91	94
List price.....			\$25.00	\$35.00	\$35.00

FOR PINCH AND CROW BARS, CHAIN AND ROLLERS, SEE INDEX

JACKS



Fig. 315



Fig. 50



Fig. 51



Fig. 55

No. 315 SIMPLEX ORDNANCE AND EMERGENCY JACK

Single Acting—Operating on the down stroke of the lever.

In addition to the recessed chain cap, chain and pivoting standard of the No. 310 Emergency Jack, there is an auxiliary detachable shoe which fits snugly in the recessed chain cap. This shoe swings free upon its axis in the cap and operates at any angle within a radius of 180°, irrespective of the angle at which the Jack is inclined. It adds another lifting point and gives the Jack a greater range of lift. A load may be handled at any point, on cap, shoe or bottom foot, or, if occasion demands, the shoe may be detached or used in conjunction with the chain.

The base is large and massive, especially designed for field work. It may be anchored at any position by means of the stake hole and two recesses at the rear.

This Jack is used for every kind of emergency or industrial purpose, or for Ordnance Departments, to lift guns that are mired or to support them in action; on board ship for use in narrow shaft alleys or confined spaces or for stiffening and strengthening bulkheads.

STANDARD EQUIPMENT

Five-foot heavy Chain with Grab Hook attached.

Five-foot Steel Lever Bar—Pinch Bar construction.

Auxiliary detachable shoe.

SPECIFICATIONS

Standard and Base.....	Malleable Iron	Lift, inches.....	12
Lever Socket.....	Drop Forging	Height, inches.....	23 ¾
Rack Bar.....	Chrome Nickel D. F.	Weight:	
Pawls.....	Drop Forging	Jack, lbs.....	62
Bushings and Keys.....	Steel	Chain lbs.....	15
Auxiliary Shoe.....	Chrome Nickel D. F.	Auxiliary Shoe, lbs.....	5
Capacity, tons.....	15	Bar, lbs.....	17
		Total weight, lbs.....	99

Price, each \$20.00

Nos. 50, 51 AND 55 SIMPLEX INDUSTRIAL JACKS

Single Acting—Operating on the down stroke of the lever bar.

Jacks Nos. 50 and 51 are especially designed for every kind of industrial service; for light cars, mining, factory and agricultural service.

Number 55 Jack is quickly adjusted to a load at any height. It is ideal for any kind of truck, industrial, mining or agricultural work. The adjustable shoe can be raised or lowered on the H-beam rack, locking firmly at any position in the circular recesses provided.

Operation is highly efficient and minimum work is necessary for the heaviest loads. Each bearing is a heavy trunnion, forged integral with the lever socket, and rotates in a hardened steel, closed end lubricant-retaining bushing.

Simplex mechanism locks the working parts in every position—a load can never be dropped.

The reversing device on the side, when revolved a half circle, changes direction of operation. The socket when not in use folds into a vertical position, thereby minimizing storage space.

In numbers 50 and 51 the steel lever pole is of pinch bar design—a handy tool for any work.

SPECIFICATIONS

Standard.....	Malleable Iron	Pawls.....	Drop Forging
Lever Socket.....	Drop Forging	Bushings and Keys.....	Steel
Rack Bar.....	Drop Forging	Lever Bar.....	Steel

Chamber	No. 50	No. 51	No. 55
Capacity, tons.....	5	5	10
Lift, inches.....	8 ½	13 ½	10 ½
Height, inches.....	15 ½	20	17
Weight with bar, lbs.....	32	38	40
List Price.....	\$20.00	\$22.00	\$30.00

FOR ROLLERS, PINCH AND CROW BARS, SEE INDEX

SIMPLEX JACKS

No. 310. SIMPLEX EMERGENCY JACK

Single Acting—Operating on the Down Stroke of the Lever

This Jack is really a combination of a Crane and a Jack. It pivots on its own base from 30° to 90° to the horizontal and lifts, lowers, pushes or pulls at any angle.

The base of the standard rests, with a machine fit, upon two curved shoulders which project upward from, and form a part of the base. Two studs hold it in position. The base, therefore, takes all thrust. A double socket is provided by means of which the lever pole is always in a convenient position—no matter what the angle of the Jack may be.

The Cap is recessed to firmly hold the links of a chain when they are dropped in position. The cap, at its "V" notched side, quickly engages wooden beams, or boxes, or because of its corrugated surface, maintains a firm contact against metal surfaces when pushing at any angle. The Jack can never slip because of the heavy calks at the bottom of the base. The bearings are massive trunnions, forged integral with the lever socket and rotate in hardened steel closed end, lubricant-retaining bushings.

Direction of operation is governed by the reversing lever on the side.

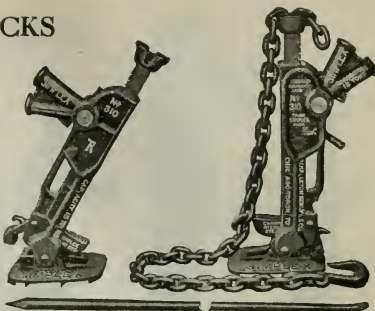


Fig. 310

STANDARD EQUIPMENT

Five-foot Chain with Grab Hook.

Five-foot Steel Lever, Pinch Bar and Car Mover combined.

SPECIFICATIONS

Standard and Base.....	Malleable Iron
Lever Socket.....	Drop Forging
Rack Bar.....	Chrome Nickel D. F.
Pawls.....	Drop Forging
Bushings and Keys.....	Steel
Lever Bar.....	Steel

Capacity, tons.....	15
Lift, inches.....	12 1/2
Height, inches.....	21 1/2
Weight of Jack, lbs.....	59
Weight of Chain and Bar, lbs.....	30
Total weight, lbs.....	89

Price.....

\$20.00

No. 318. SIMPLEX POLE JACK

Single Acting—Operating on the Down Stroke of the Lever, or Tripping at any Position

This Jack has all the features of the No. 310 so far as pivoting on its base, recessed chain cap, double socket and general construction is concerned. Added to this is the feature of tripping the

load from any point back to low position. It has far greater height and lift, however, to enable its being used in many places in which the No. 310 or 315 would not be of sufficient lift. In pulling a telephone pole, or for sawing off a decayed base, it is possible to get hold high and lift fully two feet. If this is insufficient lift, the pole is held, the cap quickly tripped to low position and a new hold taken. Only a fraction of the time required by any other method is necessary. The big saving of labor and expense usually affects an entire pole pulling crew.

There are numerous other demands for this Jack on railroads, in construction and industrial fields.

STANDARD EQUIPMENT

- 8 foot Hand-forged Chain, with pear-shaped link
- 5 foot Steel Lever or Pinch Bar.
- 2 feet of 10 inch, 25 lb. I Beam Base Support.

SPECIFICATIONS

Standard and Base.....	Malleable Iron
Lever Socket.....	Drop Forging
Rack Bar.....	Chrome Nickel Steel
Pawls.....	Drop Forging
Bushings and Keys.....	Steel
Capacity, tons.....	15
Lift, inches.....	24
Height, inches.....	39
Weight of Jack, lbs.....	34
Weight of Chain, lbs.....	34
Weight of Bar, lbs.....	17
Total weight, lbs.....	189
Price.....	\$35.00



Fig. 318

FOR ROLLERS, WIRE ROPE, CHAIN, ETC., SEE INDEX

AUTOMOBILE JACKS



Fig. 36



Fig. 41

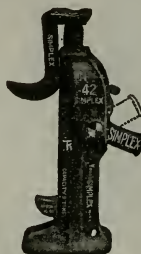


Fig. 42



Fig. 43

NO. 36 SIMPLEX AUTOMOBILE JACK

This little Jack is carefully designed and constructed throughout of high quality, homogeneous, malleable castings. The middle shoe, which is integral with the rack bar, supplies an extra lifting point—useful in many awkward positions. The rack bar teeth and all working parts are machined.

Every Simplex Automobile or Truck Jack, with equipment, is neatly and securely packed in a heavy corrugated board box. The attractive label plainly shows the contents. This insures a clean stock, quickly locates any size of Jack, economizes storage space and avoids further packing for reshipment.

Price \$1.50

Capacity, lbs.	1,000
Lift, inches.	6½
Height, inches.	10
Weight, lbs.	5

A 12 inch Hard Maple Lever Bar is Furnished with Jack

NOS. 41, 42, 43, SIMPLEX AUTOMOBILE AND INDUSTRIAL JACKS

Double Acting—Operating on the up and down stroke of the lever bar.

These Jacks are miniatures of the larger Simplex Jacks. The same care in construction and design is present, with the addition of a valuable asset—a detachable shoe. This shoe, fitting snugly in the cap, swings in a radius of 180° and is available in every position. A load may be handled at any point because of the foot, the shoe and the cap—three carrying points.

The arc of travel of the steel lever bar is small, hence the load never obstructs movement of the hand. These Jacks are so highly efficient that the effort expended is about the same as that on the very best geared Jack.

Direction of operation is regulated by the lever on the side.

It would not be possible to build an Auto Jack of better material than is used in any of the above Jacks.

SPECIFICATIONS

Standard Malleable Iron			
Lever Socket. Drop Forging			
Rack Bar. Drop Forging			
Pawls Drop Forging			
Bushings and Keys. Steel			
Lever Bar. Steel			
Detachable Shoe. Drop Forging			
Capacity, tons.	No. 41	No. 42	No. 43
Height, inches.	1	2	3
Lift, inches.	10	11½	13
Weight, with bar, lbs.	7	8½	10
Price each.	9½	11	13
	\$4.25	\$5.00	\$6.00

FOR TIRES, TUBES, TOOL KITS, ETC., SEE INDEX